



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,355	06/22/2006	Minghua Dai	16836.1	3352
22913	7590	04/27/2009	EXAMINER	
Workman Nydegger 1000 Eagle Gate Tower 60 East South Temple Salt Lake City, UT 84111			TRA, TUYEN Q	
			ART UNIT	PAPER NUMBER
			2873	
			MAIL DATE	DELIVERY MODE
			04/27/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,355	Applicant(s) DAI ET AL.	
	Examiner TUYEN Q. TRA	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

1. The Oath/Declaration filed on 06/22/2006 are considered.

Drawings

2. The drawings filed on 06/22/2006 have been objected by drafts person. See attached PTO-948 form.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 12/15/2006 is being considered by the examiner.

Claim Objections

4. Claims 7, 8, 13 and 14 are objected to because of the following informalities:

Claim 7 recites "a carrier table" which is not disclosed or supported from applicant specification. Appropriate correction is required.

Claim 8 recites "may be fixed or adjustable" which renders claims the claim indefinite because the claim unclear as to whether or not certain limitations following such indefinite language are intended to be part of the claimed subject matter. Appropriate correction is required.

Claim 13 recites of $P=3^{\Delta}$ about 15^{Δ} ” which is not clear to examiner what does “ Δ ” stand for. Appropriate correction/clarification is required.

Claim 14 should only have only one capital letter starting the claim, all other capital letters should be changed to small, since this confuses whether or not the claim is in one sentence form.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 9, 10, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blum et al. (US Pub. 2006/0098164).

With respect to claim 1, Blum et al. discloses a frame (figure 2, element 200) having an object (i.e. eye charts, the patient reviews the eye charts through his/her own electro-active eyewear 220) associated therewith, a spectacles frame (figure 2, elements 230, 240, 250, 260) coupled to the frame, and two lenses coupled to said spectacles frame (230, 240, 250, 260). However, Blum et al. does not implicitly disclose wherein the diopter value (Φ) of the lenses is governed by the equation $\Phi=1/u+A+B-\Delta\Phi$, wherein "A" is the degree of myopia, which is negative and reflects the diopter of distance vision correcting, "B" is the degree of focus-out diopter and has a value between 0.1~3D, " $\Delta\Phi$ " is the adjust value, and "u" is the distance between the object and said lenses. It is obvious that Blum et al. functions the same since Blum

Art Unit: 2873

disclose a similar structure claimed by applicant. In additionally, the Applicant has presented no discussion in the specification which convinces the Examiner that the particular formula is critical feature invented by applicant.

With respect to claim 9, Blum et al. further discloses wherein the lens (element 210) is substitutable lens.

With respect to claim 10, Blum et al. further discloses wherein the subject is a visual object.

With respect to claim 12, Blum et al. further discloses wherein the object is a double viewed object and is paratactic so imaging can be formatted binocularly by double lenses.

With respect to claim 13, Blum et al. further discloses wherein the lenses are a triangular prism having a degree of $P=3^\Delta$ about 15^Δ , and the special visual object is a single vision mark.

7. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blum et al. (US Pub. 2006/0098164), as applied to claims 1 above, in view of Balliet (US 4,408,846).

With respect to claims 2-4, Blum et al. discloses a frame (figure 2, element 200) having an object (i.e. eye charts, the patient reviews the eye charts through his/her own electro-active eyewear 220) associated therewith, a spectacles frame (figure 2, elements 230, 240, 250, 260) coupled to the frame, and two lenses coupled to said spectacles frame (230, 240, 250, 260). The diopter value (Φ) of the lenses is governed by the equation $\Phi=1/u+A+B-\Delta\Phi$, wherein "A" is the degree of myopia, which is negative and reflects the diopter of distance vision correcting, "B" is the degree of focus-out diopter and has a value between 0.1~3D, " $\Delta\Phi$ " is the adjust value, and "u" is the distance between the object and the lenses. However, Blum does not disclose wherein

Art Unit: 2873

the value of u is between 250mm-330mm. Balliet teaches in Figure 1 with a lens (element 15); a target (element 20); wherein the target (20) is movable on rack (39), and the distance between the lens (15) and the target (20) is variable.

It would have been obvious, therefore, at the time the invention was made to a person having skill in the art to construct the acoustic imaging apparatus with a lens and object such as disclosed by Blum, and with distance between lens and target variable such as discloses by Balliet, for purpose of adjusting target image.

With respect to claim 5, the teachings of Blum et al. in view of Balliet are described above. Balliet also teaches wherein the distance between the lens and target is adjustable because it contains the monitor drive (figure 1, element 13) and the rack (39).

With respect to claim 6, Blum et al. further discloses wherein a table-frame of spectacles (230, 240, 250, 260), wherein said table-frame of spectacles is a machine controlled device configured to be fixed or adjustable.

With respect to claim 7, Blum et al. discloses a carrier table under said table-frame of spectacles (230, 240, 250, 260), and there is an elevator of the carrier table.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blum et al. (US Pub. 2006/0098164), as applied to claims 1 above, in view of Kohayakawa (US 5,231,430).

Blum et al. discloses a frame (figure 2, element 200) having an object (i.e. eye charts, the patient reviews the eye charts through his/her own electro-active eyewear 220) associated therewith, a spectacles frame (figure 2, elements 230, 240, 250, 260) coupled to the frame, and two lenses coupled to said spectacles frame (230, 240, 250, 260). The diopter value (Φ) of the

Art Unit: 2873

lenses is governed by the equation $\Phi=1/u+A+B-\Delta\Phi$, wherein "A" is the degree of myopia, which is negative and reflects the diopter of distance vision correcting, "B" is the degree of focus-out diopter and has a value between 0.1~3D, " $\Delta\Phi$ " is the adjust value, and u is the distance between the object and the lenses. However, Blum does not disclose wherein the lenses are a concave and convex lens. Kohayakawa teaches a knockdown lens (Figure 10, element 31) comprising a convex lens and concave lens (column 11, lines 15-16).

It would have been obvious, therefore, at the time the invention was made to a person having skill in the art to construct an ophthalmic apparatus with a knockdown lens such as disclosed by Blum et al., and with a knockdown lens (Figure 10, element 31) comprising a convex lens and concave lens such as discloses by Kohayakawa, for purpose of adjusting target image.

9. Claims 11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blum et al. (US Pub. 2006/0098164), as applied to claims 1 above.

With respect to claim 11, Blum et al. discloses a frame (figure 2, element 200) having an object (i.e. eye charts, the patient reviews the eye charts through his/her own electro-active eyewear 220) associated therewith, a spectacles frame (figure 2, elements 230, 240, 250, 260) coupled to the frame, and two lenses coupled to said spectacles frame (230, 240, 250, 260). The diopter value (Φ) of the lenses is governed by the equation $\Phi=1/u+A+B-\Delta\Phi$, wherein "A" is the degree of myopia, which is negative and reflects the diopter of distance vision correcting, "B" is the degree of focus-out diopter and has a value between 0.1~3D, " $\Delta\Phi$ " is the adjust value, and

Art Unit: 2873

"u" is the distance between the object and the lenses. However, Blum does not disclose wherein the object is a game machine's LCD.

Since both a view chart and a game machine's LCD function as a visual object, the selection of a game machine's LCD in place of the view chart is seen as design experience upon the environment of use to ensure optimum performance. Therefore, it would have been obvious at the time the invention was made to a person having skill in the art to replace the view chart in ophthalmic system with a game machine's LCD for matter of design choice. In addition, applicant does not discuss any technical advantage or critical to use the game machine's LCD. It is therefore obvious to one skill in the art to use game machine's LCD for varying visual object for viewer.

With respect to claims 14 and 15, Applicant's claims 14 and 15 are "product by method" claims and do not distinguish over the Blum's reference regardless of the method used for training myopia. It should be noted that the method of forming the device, such as "providing" and "adjusting"...etc., is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN Q. TRA whose telephone number is (571)272-2343. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L. Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott J. Sugarman/
Primary Examiner, Art Unit 2873

/Tuyen Q Tra/
Examiner, Art Unit 2873